DOCUMENT RESUME

ED 426 108 TM 029 342

AUTHOR	Ziomek, Robert L.; Andrews, Kevin M.
TITLE	ACT Assessment Score Gains of Special-Tested Students Who Tested at Least Twice.
INSTITUTION	American Coll. Testing Program, Iowa City, IA.
REPORT NO	ACT-RR-98-8
PUB DATE	1998-10-00
NOTE	41p.
AVAILABLE FROM	ACT Research Report Series, P.O. Box 168, Iowa City, IA 52243-0168.
PUB TYPE	Numerical/Quantitative Data (110) -- Reports - Research (143)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Achievement Gains; *College Entrance Examinations; *Disabilities; *High School Students; High Schools; *Scores; Special Needs Students; Tables (Data); Test Results; *Timed Tests
IDENTIFIERS	*ACT Assessment; Composite Scores; *Special Test Administration; Testing Accommodations (Disabilities)

ABSTRACT

The scores of students with disabilities who took the ACT Assessment at least twice, and at least once under extended-time guidelines, were studied. The investigation identified three groups of students. The first group was composed of 3,410 students who tested at least twice under extended-time guidelines. The second group of 3,439 students initially tested under standard-time limits and then retested under extended-time limits. The third group of 439 students initially tested under extended-time guidelines and retested under standard-time limits. Of the three groups of students, the second group had the largest average ACT Composite score gain of 3.2 scale score points. The third group of students had an average ACT Composite score decline of 0.6 scale score points. The first group had an average ACT Composite score gain of 0.9 scale score points, which is similar to that of students who tested twice under standard-time limits. Three appendixes contain the ACT Assessment extended-time guidelines, the request form for ACT special testing, and diagnosis, timing guidelines, and the test package legend for four of the study's tables. (Contains seven tables and four references.) (Author/SLD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ACT Research Report Series 98-8

ED 426 108

ACT Assessment Score Gains of Special-Tested Students Who Tested at Least Twice

Robert L. Ziomek

Kevin M. Andrews

Patricia Farrant

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

TM029342

ACT

BEST COPY AVAILABLE

October 1998

For additional copies write:
ACT Research Report Series
PO Box 168
Iowa City, Iowa 52243-0168

© 1998 by ACT, Inc. All rights reserved.

BEST COPY AVAILABLE

ACT Assessment Score Gains of Special-Tested Students Who Tested at Least Twice

Robert L. Ziomek
Kevin M. Andrews

Abstract

This study's goal was to investigate the scores of students with disabilities who took the ACT Assessment at least twice, and at least once under extended-time guidelines. This investigation identified three distinct groups of students. The first group was composed of students who tested at least twice under extended-time guidelines. The second group of students initially tested under standard-time limits and then retested under extended-time guidelines. The third group of students initially tested under extended-time guidelines and retested under standard-time limits. Of the three groups of students, the second group had the largest average ACT Composite score gain of 3.2 scale score points. The third group of students had an average ACT Composite score decline of 0.6 scale score points. The first group had an average ACT Composite score gain of 0.9 scale score points, which is similar to that of students who tested twice under standard-time limits.

ACT Assessment Score Gains of Special-Tested Students Who Tested at Least Twice

Since the introduction of the Enhanced ACT Assessment in the fall of 1989, the number of ACT students with disabilities testing under extended-time guidelines has increased almost threefold. The total volume (number of tests taken, not individual students) of tests administered under extended-time guidelines in 1989-90 was 8,519. For the 1995-96 testing year, the total volume of tests administered under extended-time guidelines rose to 23,463. During this period of time the percentage of tests administered under extended-time guidelines has risen from slightly less than one percent of the total volume to approximately two percent of the yearly total tested volume.

In response to this rapid growth in the number of students with disabilities pursuing higher education opportunities and, consequently, registering to take the ACT Assessment, ACT systematically implemented revisions to the test administration guidelines to accommodate the variety of diagnosed disabilities. For example, during the 1989-90 and 1990-91 academic years, the only guideline was that each test must be completed on one day. For the 1991-92 testing year, ACT provided a guideline to help individuals schedule test sessions of three hours per test.

These earlier extended-time guidelines applied to all students approved for extended time, regardless of diagnosed disability or testing format (e.g., Braille, large print, audio cassette, etc). Beginning with the 1992-93 testing year, the extended-time guidelines were tailored to the testing format or package based upon analyses of actual time used by students over the past few years. Appendix A displays the modifications to the extended-time guidelines beginning with 1989 to the present. Appendix B provides a list of diagnoses/disabilities categories as well as available test formats.

Students with documented disabilities, who request to test under extended-time, may request the test format most suitable to their particular needs when they register to take the ACT Assessment. The specific extended-time guideline assigned is then a function of the test format requested and the diagnosed disability.

Not all students with documented disabilities request to test the first time under extended-time guidelines. Our study identified students with documented disabilities who initially tested under standard time limits, and then elected to retest under extended-time testing conditions. Our study also identified a group of students who initially tested under-extended time testing conditions, and for whatever reason(s), chose to retest under standard testing conditions.

The purpose of this study was not to document the reasons students elected to retest and subsequently request a change in the mode of testing. Rather the study was designed to identify students with documented disabilities who tested at least twice, with at least one extended-time administration, to examine the various testing patterns, and to document the achievement results associated with these testing patterns by disability, test format, and extended-time guidelines. The motivating need for this study was and, for the most part, still is the current lack of information, both in the professional literature and unpublished manuscripts, regarding the achievement on college entrance exams of students with diagnosed disabilities. This problem is primarily due to the lack of data available for analysis. However, because of the steady increase in the number of college bound students electing to take the ACT Assessment under extended time, test data can now be aggregated across years to accumulate a sufficient number of records for study purposes. This increase may well be associated with the passage of the 1990 Americans with Disabilities Act, which has increased attention to the fair treatment of individuals with disabilities.

Data and Analysis

The records of students from the 1992-93 through 1994-95 testing years were selected for analysis because across this three-year period the extended-time guidelines were consistent, and no changes or additions to the testing formats were made (refer to Appendix A). The total volume of tests administered with extended time during this period was 52,667. Of this total count, a subset of 7,288 students with disabilities were identified who tested at least twice with at least one extended-time administration. Specifically, of this group of 7,288 students, 3,410 (Group I) individuals who initially tested under extended-time guidelines also retested under the same testing conditions. Group II (3,439 students) represents individuals who initially tested under standard time limits and then retested under extended-time guidelines. Group III (439 students) represents individuals who initially tested under extended-time guidelines and then retested under standard time limits.

The analysis of these three groups was conducted in the following manner. The initial test score distribution of ACT Composite scale scores was generated for each group. Similarly, the final distribution of ACT Composite scale scores was determined, and the average ACT Composite gain score, conditioned on the initial ACT Composite scale score, was calculated. In addition, for each scale score across the ACT scale score range (1 through 36), the percent of students scoring less than, equal to, and greater than their initial ACT Composite score was determined. Tables 1, 3 and 5 summarize the distribution of scale score results for each of the three groups of students respectively. Tables 2, 4 and 6 display the summary of test results for each of the three groups broken down by diagnosed disability and extended-time guidelines.

Because this study is limited to a self-selected group of individuals who took the ACT

Assessment at least twice and at least once under extended-time guidelines, the results cannot be generalized to all students with disabilities.

Results and Discussion

Group I Results

Table 1 displays the average ACT Composite score achievement gains of students with disabilities who tested at least twice under extended-time guidelines broken down by initial test score, while Table 2 presents the achievement results for this group of students summarized by diagnosed disability, timing guideline and test package. Appendix C provides a legend of the diagnoses, timing guidelines, and a description of the testing packages referred to in Table 2 and in subsequent tables. Overall, the average gain across the scale score range for the ACT Composite for all students in this group was 0.9 scale score points. This is less than the standard error of measurement for the ACT Composite, which is 1.0 scale score point. Fifty-eight percent of Group I students (3,410) had a final ACT Composite scale score greater than their initial score.

An examination of Table 2 reveals that students diagnosed with Attention Deficit Disorder (AD), who were given up to triple time on each of the four tests in the ACT Assessment battery and used the regular print version of the examination, had the highest final average ACT Composite score (19.5). Students diagnosed as Learning Disabled (LD) who were allowed up to three hours to complete each of the four tests and used the regular print version of the test along with an audio cassette had the lowest final average ACT Composite score of 16.9. Despite these relatively low average scores, all of the categories of students in Group I had a minimum average gain of 0.9 scale score points on the ACT Composite.

The overall average Composite score gain of 0.9 scale score points for Group I students is similar to the 0.7 scale score point average ACT Composite score gain for students who tested at least twice under standard conditions (Andrews & Ziomek, in press).

Group II Results

Tables 3 and 4 present the results for students with disabilities who initially tested under standard time limits and then retested under extended-time guidelines. These two tables are formatted in the same fashion as Tables 1 and 2. The average ACT Composite scale score gain for this group of students was 3.2 scale score points, a substantial improvement. Approximately 86% of the 3,439 students in this group had higher scores on retesting under extended-time guidelines (Table 3). Students diagnosed with Attention Deficit Disorder (AD) who had up to triple time to complete each of the four ACT Tests and used the regular print version had an average ACT Composite scale score gain of 4.7 scale score points. This subgroup of students had a final average ACT Composite score of 22.1, compared to an initial average ACT Composite score of 17.4 earned under standard time limits (Table 4). Similar to Group I students, the poorest performing students in Group II were the students diagnosed as Learning Disabled (LD). Although these students had an average ACT Composite scale score gain of 2.7 scale score points, their final average ACT Composite score, under extended-time guidelines was 17.8 scale score points (Table 4).

Group III Students

This group of students initially took the ACT Assessment under extended-time guidelines and elected, for reasons unknown, to retest under standard time limits. Group III also had the fewest number of students (439) compared to the other two groups.

The average ACT Composite scale score change for this group was -0.6 scale score points.

Only 27% of the students in this group had an increase of at least one scale score point in their ACT Composite scale score from initial testing under extended-time guidelines to retesting under standard time limits (Table 5). All categories of students in this group, regardless of diagnosis, timing guideline, or test package had the lowest final average ACT Composite scale scores compared to similar categories of students in the other two groups of testers (Table 6).

Discussion

This study's primary goal was to investigate the achievement patterns of students with disabilities who took the ACT Assessment at least twice, and at least once under extended-time guidelines. As a result of this investigation, three distinct groups of students were identified. Group I students were students who took the ACT Assessment under extended-time guidelines at least twice. Group II students initially tested under standard time limits with the regular print version of the ACT Assessment, on one of the five national test dates, then subsequently tested under extended-time guidelines. Finally, Group III students took the ACT Assessment initially under extended-time guidelines and tested again under standard time limits.

It should be noted that when students with disabilities request special testing, they indicate their diagnosis, provide documentation of the diagnosis and prior accommodations, and request the accommodation or test package they desire. Based upon the information provided by the student, ACT assigns the appropriate extended-time guideline for the test administration. The extended-time guidelines that have been established by ACT are based upon at least 90% of students with the same combination of test package and diagnosis finishing within that guideline. These guidelines are provided for planning and scheduling purposes and may be exceeded in individual cases.

Table 7 presents a summary of the initial and final average ACT Composite scale scores for

the three groups of students by timing guideline and test package within diagnosis. In general, Group II students had lower initial average ACT Composite scores compared to the other two student groups; however, this group had the highest overall average gain and final average ACT Composite score. Within diagnosis and across all three student groups, students who were administered test package #4 (audio cassette plus regular print version) and were allowed up to three hours to complete each of the four tests (timing guideline #4), had lower initial and final average ACT Composite scores compared to students with similar diagnoses but different testing conditions. This performance may be associated with the "degree" of severity of the diagnosis, necessitated by the greater amount of time allowed to finish as well as the audio cassette accommodation.

The results of this study raise two important and related questions. First, do students with disabilities benefit from taking the ACT Assessment under extended time? The answer to this question is an unequivocal "yes". Group II students who initially tested under standard time limits and retested under extended-time guidelines had an average gain of 3.2 scale score points on the ACT Composite, three times the standard error of measurement for the ACT Composite, which is 1.0 scale score units. Likewise, Group III students who tested initially under extended-time guidelines and then retested under standard time limits, had their ACT Composite score drop, on average, by 0.6 scale score units.

Second, what do these results suggest regarding the "flagging" of test scores of students who have been provided extended time as a testing accommodation? This issue is directly related to the concern over comparability of test scores between standard and nonstandard test administrations. Some historical context is necessary in order to address this question.

In 1977, the United States Department of Health, Education and Welfare developed regulations related to the implementation of Section 504 of the Rehabilitation Act of 1973. These regulations specified that college admissions tests for individuals with disabilities be validated, and that the scores reflect what the test was intended to measure. A year later, the Department's Office of Civil Rights issued an interim policy permitting test publishers to notify the recipients of student scores if a student was administered the test under nonstandard conditions. Test publishers could continue to "flag" student scores, until the comparability of test scores between standard and nonstandard test administrations could be established.

This interim policy appears consistent with AERA/APA/NCME Standards 14.2 and 15.4 (AERA, APA, NCME, 1985), with a "slight" exception; Standard 15.4 specifically excludes admissions tests when discussing cautions associated with nonstandard test administrations. This exception is most likely due to the fact that the Standards Committee was acknowledging the interim policy since the Standards postdate the inception of the policy. Nevertheless, the Standards Committee felt compelled to note that,

> Of all the aspects of testing people who have handicapping conditions, reporting test scores has created the most heated debate. Many test developers have argued that reporting scores from nonstandard test administrations without special identification (often called "flagging of test scores) violates professional principles, misleads test users, and perhaps even harms handicapped test takers whose scores do not accurately reflect their abilities. .... Until test scores can be demonstrated to be comparable in some widely accepted sense, there is little hope of happily resolving from all perspectives the issue of reporting scores with or without special

> identification. Professional and ethical considerations should be weighed to arrive at a solution, either as an interim measure or as continuing policy (p. 78).

In a planning paper prepared for the National Academy of Sciences Board of Testing and Assessment, William Mehrens (1997), concluded that, "After years of research, the profession has insufficient evidence to conclude the scores given [*sic*] under non-standard administrations mean the same thing as scores obtained under standard administrative conditions" (p. 36). Willingham, Ragosta, Bennett, Braun, Rock, and Powers (1988) concluded that "The primary source of noncomparability that is directly associated with test scores is the extended time available in the nonstandard test administrations " (p. 185). However, it seems reasonable to assume that extended-time accommodations will continue to be available, in order to insure that students with disabilities have sufficient time to complete the test. Given the conclusions of Mehrens and of Willingham, et.al., and given the large change in the average ACT Composite score for students who initially tested under standard-time limits and retested under extended-time guidelines, it is reasonable to conclude that the flagging of scores from nonstandard test administrations should be continued.

TABLE 1

Group I Summary Statistics for Students Who Tested at Least Twice Under Extended-Time Guidelines

Initial ACT Composite score	N	Final average Composite score	Average gain	% of students scoring less than initial score	% of students scoring equal to initial score	% of students scoring greater than initial score
5	1	18.0	13.0	0.0	0.0	1.0
10	5	13.8	3.8	0.0	0.0	1.0
11	39	13.5	2.5	0.0	12.8	87.2
12	158	13.5	1.5	10.1	19.6	70.3
13	351	14.1	1.1	17.4	23.1	59.5
14	457	14.9	0.9	24.1	22.3	53.6
15	450	15.9	0.9	24.7	18.0	57.3
16	488	17.0	1.0	22.3	19.5	58.2
17	367	17.7	0.7	27.8	17.4	54.8
18	261	18.8	0.8	27.2	17.2	55.6
19	200	19.8	0.8	24.0	20.5	55.5
20	173	20.9	0.9	25.4	16.8	57.8
21	120	21.9	0.9	25.8	12.5	61.7
22	91	22.5	0.5	29.7	15.4	54.9
23	79	24.3	1.3	11.4	25.3	63.3

TABLE 1 cont'd.

Group I Summary Statistics for Students Who Tested at Least Twice Under Extended-Time Guidelines

Initial ACT Composite score	N	Final average Composite score	Average gain	% of students scoring less than initial score	% of students scoring equal to initial score	% of students scoring greater than initial score
24	50	24.4	0.4	28.0	18.0	54.0
25	42	25.9	0.9	19.0	19.0	61.9
26	31	27.1	1.1	9.7	22.6	67.7
27	20	28.0	1.0	15.0	25.0	60.0
28	10	29.3	1.3	20.0	10.0	70.0
29	11	30.2	1.2	9.1	18.2	72.7
30	3	31.0	1.0	0.00	33.3	66.7
31	3	30.7	-0.3	66.7	0.0	33.3
Overall	3410	17.6	0.9	22.6	19.2	58.1

TABLE 2

Group I Summary Statistics by Diagnosis, Test Package, and Timing Guideline for Students Tested at Least Twice Under Extended-Time Guidelines

Diagnosis	Timing	Test package	N	Final average Composite score	Average gain	% of students scoring less than initial score	% of students scoring equal to initial score	% of students scoring greater than initial score
AD	3	1	399	19.5	1.2	21.3	19.8	58.9
AD	4	4	164	18.5	1.2	17.1	21.3	61.6
DY	2	1	342	17.8	0.9	24.9	18.4	56.7
DY	4	4	471	17.1	1.0	21.9	18.7	59.4
LD	2	1	1134	17.6	0.9	22.6	19.8	57.6
LD	4	4	900	16.9	0.9	23.9	18.4	57.7
Overall			3410	17.6	0.9	22.6	19.2	58.1

TABLE 3

Group II Summary Statistics for Students Who Initially Tested Under Standard Time Limits and Who Retested Under Extended-Time Guidelines

Initial ACT Composite score	N	Final average Composite score	Average gain	% of students scoring less than initial score	% of students scoring equal to initial score	% of students scoring greater than initial score
9	3	13.7	4.7	0.0	0.0	1.0
10	9	14.0	4.0	0.0	0.0	1.0
11	64	14.2	3.2	0.0	6.2	93.8
12	199	14.7	2.7	1.5	11.1	87.4
13	355	15.5	2.5	8.5	13.8	77.7
14	424	16.4	2.4	10.4	13.9	75.7
15	426	17.8	2.8	11.0	8.2	80.8
16	432	19.2	3.2	8.3	6.7	84.9
17	376	20.4	3.4	6.4	3.7	89.9
18	300	21.7	3.7	3.7	5.7	90.7
19	233	22.8	3.8	4.7	3.9	91.4
20	151	23.4	3.4	7.9	5.9	86.1
21	144	25.2	4.2	2.1	2.8	95.1
22	105	26.2	4.2	3.8	1.9	94.3

TABLE 3 cont'd.

Group II Summary Statistics for Students Who Initially Tested Under Standard Time Limits and Who Retested Under Extended-Time Guidelines

Initial ACT Composite score	N	Final average Composite score	Average gain	% of students scoring less than initial score	% of students scoring Equal to initial score	% of students scoring greater than initial score
23	76	27.4	4.3	2.6	2.6	94.7
24	55	28.1	4.1	3.6	5.5	90.9
25	28	29.5	4.5	0.0	0.0	1.0
26	24	29.9	3.9	0.0	4.2	95.8
27	16	30.8	3.8	0.0	6.3	93.8
28	16	31.4	3.4	0.0	6.3	93.8
29	1	31.0	2.0	0.0	0.0	1.0
30	1	29.0	-1.0	1.0	0.0	0.0
31	1	33.0	2.0	0.0	0.0	1.0
Overall	3439	19.8	3.2	6.7	7.6	85.7

TABLE 4

Group II Summary Statistics by Diagnosis, Test Package and Timing Guideline for Students Who Tested Initially Under Standard Time Limits and Who Retested Under Extended-Time Guidelines

Diagnosis	Timing	Test package	N	Final average Composite score	Average gain	% of students scoring less than initial score	% of students scoring equal to initial score	% of students scoring greater than initial score
AD	3	1	953	22.1	4.7	3.6	4.7	91.7
AD	4	4	180	19.7	3.6	6.7	7.8	85.6
DY	2	1	437	19.6	3.2	6.6	9.4	83.9
DY	4	4	318	18.5	3.2	5.7	6.9	87.4
LD	2	1	1038	19.1	2.8	8.1	9.2	82.7
LD	4	4	513	17.8	2.7	10.3	8.4	81.3
Overall			3439	19.8	3.2	6.7	7.6	85.7

TABLE 5

Group III Summary Statistics for Students Who Initially Tested Under Extended-Time Guidelines and Who Retested Under Standard Time Limits

Initial ACT Composite Score	N	Final average Composite score	Average gain	% of students scoring less than initial score	% of students scoring equal to initial score	% of students scoring greater than initial score
10	1	9.0	-1.0	1.0	0.0	0.0
11	6	14.2	3.2	0.0	16.7	83.3
12	32	13.9	1.9	9.4	9.4	71.9
13	59	13.5	0.5	27.1	35.6	37.3
14	48	14.6	0.6	25.0	33.3	41.7
15	63	15.0	0.0	47.6	22.2	30.2
16	51	14.9	-1.0	66.7	19.6	13.7
17	38	15.7	-1.3	76.3	13.2	10.5
18	33	17.0	-0.9	63.6	18.2	18.2
19	22	17.7	-1.3	68.2	22.7	9.1
20	19	17.9	-2.1	84.2	5.3	10.5
21	13	18.3	-2.7	76.9	15.4	7.7
22	15	19.7	-2.3	80.0	0.0	20.0
23	8	21.2	-1.8	75.0	0.0	25.0

TABLE 5 cont'd.

Group III Summary Statistics for Students Who Initially Tested Under Extended-Time Guidelines and Who Retested Under Standard Time Limits

Initial ACT Composite score	N	Final average Composite score	Average gain	% of students scoring less than initial score	% of students scoring equal to initial score	% of students scoring greater than initial score
24	6	21.2	-2.8	83.3	16.7	54.0
25	8	21.5	-3.5	87.5	0.0	12.5
26	7	21.9	-4.1	1.0	0.0	0.0
27	1	26.0	-1.0	1.0	0.0	0.0
28	2	25.0	-3.0	50.0	0.0	50.0
29	1	21.0	-8.0	1.0	0.0	0.0
30	4	25.3	-4.8	1.0	0.0	0.0
31	1	25.0	-6.0	1.0	0.0	0.0
33	1	28.0	-5.0	1.0	0.0	0.0
Overall	439	16.0	-0.6	53.1	20.0	26.9

TABLE 6

Group III Summary Statistics by Diagnosis, Test Package and Timing Guideline for Students Who Tested Initially Under Extended-Time Guidelines and Who Retested Under Standard Time Limits

Diagnosis	Timing	Test package	N	Final average Composite score	Average gain	% of students scoring less than initial score	% of students scoring equal to initial score	% of students scoring greater than initial score
AD	3	1	75	18.2	-0.9	58.7	17.3	24.0
AD	4	4	15	17.0	-0.8	60.0	26.7	13.3
DY	2	1	47	15.0	-0.5	51.1	27.7	21.2
DY	4	4	51	15.6	-0.4	52.9	21.6	25.5
LD	2	1	153	16.0	-0.3	47.7	18.3	33.9
LD	4	4	98	14.9	-0.9	57.1	19.4	23.5
Overall			439	16.0	-0.6	53.1	20.0	26.9

TABLE 7

Comparison of Initial and Final Average ACT Composite Scale Scores, by Diagnosis, Timing Guideline, and Test Package

			Group I		Group II		Group III	
Diagnosis	Timing	Test package	Initial average	Final average	Initial average	Final average	Initial average	Final average
AD	3	1	18.3	19.5	17.4	22.1	19.1	18.2
AD	4	4	17.3	18.5	16.1	19.7	17.8	17.0
DY	2	1	16.9	17.8	16.4	19.6	15.5	15.0
DY	4	4	16.1	17.1	15.3	18.5	16.0	15.6
LD	2	1	16.7	17.6	16.3	19.1	16.3	16.0
LD	4	4	16.0	16.9	15.1	17.8	15.8	14.9
Overall			16.7	17.6	16.6	19.8	16.6	16.0

References

AERA/APA/NCME. (1985). Standards for educational and psychological testing. Washington, DC: American Psychological Association.

Andrews, K.M., Ziomek, R.L. (in press). Score gains on retesting with the ACT Assessment. Iowa City, IA: ACT, Inc.

Mehrens, W.A. (1997). Flagging test scores: Policy,practice and research. Unpublished manuscript. Michigan State University, East Lansing, MI.

Willingham, W.W., Ragosta, M., Bennett, R.E., Braun, H., Rock, D.A., & Powers, D.E. (1988). Testing handicapped people. Boston: Allyn and Bacon

Appendix A

ACT Assessment Special Testing Extended Time Guidelines
1989-90 thru 1997-98

Test Year	Extended Time Guideline
1989-90	Up to one day per test
1990-91	same as 1989-90
1991-92	Up to three hours per test
1992-93	<u>Regular or large print materials:</u> Timing guideline 2 = Up to double time for the English and Mathematics tests, and up to triple time for the Reading and Science Reasoning tests Timing guideline 3 = Up to triple time for each test <u>Cassette, braille, and script readers:</u> Timing guideline 4 = Up to three hours per test
1993-94	same as 1992-93
1994-95	same as 1992-93
1995-96	<u>Regular or large print materials:</u> Timing guidelines 2 and 3 same as previous three years <u>Cassette, braille, and script readers:</u> Timing guideline 4 = Up to three hours for English, Reading, and Science Reasoning tests and up to four hours for the Mathematics test.
1996-97	same as 1995-96
1997-98	same as 1995-96

Appendix B

Request Form For ACT Assessment Special Testing

1996–97 REQUEST FORM FOR ACT ASSESSMENT SPECIAL TESTING

(To Be Completed By Supervisor)

Please type or print clearly

INCOMPLETE AND/OR UNSIGNED FORMS WILL BE RETURNED, UNPROCESSED

A. STUDENT INFORMATION

Last Name _____ First Name _____ Middle Initial _____

House Number _____ Street _____ Apartment Number _____

City _____ State _____ ZIP Code _____

Social Security Number _____ Date of Birth _____

High School or College Currently Attending _____

Date of Previous ACT **Special** Testing _____

B. SUPERVISOR'S MAILING INFORMATION

Name _____

Your Title _____

Institution _____

Street Address and Post Office Box Number _____

City _____ State _____ ZIP Code _____

Country (if outside U.S.) _____

Area Code/Telephone Number (daytime) _____ Fax Number _____

C. PROPOSED DATE OF TESTING (September 1, 1996–June 30, 1997) _____

A minimum of 60 days must elapse between repeat testings for a student. Requests must be received at least four weeks before proposed test date (6 weeks for students outside the United States) to allow for reviewing of requests and shipping of materials. Requests postmarked after June 1, 1997 will be returned.

D. DIAGNOSIS/DISABILITY (Check all that apply.)

Learning Disability (01)

- ☐ (DA) Developmental Arithmetic Disorder
- ☐ (DY) Developmental Reading Disorder (Dyslexia)
- ☐ (DW) Developmental Writing Disorder
- ☐ (LD) Other Learning Disability (explain on side 2)

Physical/Sensory Disability (02)

- ☐ (DF) Hearing Impairment
- ☐ (PH) Motor Impairment
- ☐ (VI) Visual Impairment
- ☐ (TR) Tourettes Syndrome
- ☐ (EP) Epilepsy or Seizures

Psychological/Mental Disability (03)

- ☐ (AD) Attention Deficit Disorder
- ☐ (AX) Anxiety Disorder
- ☐ (PD) Other Psychological/Mental Disability (explain on side 2)

Other Disability (07)

- ☐ (HB) Confined to the home (explain on side 2)
- ☐ (OD) (explain on side 2)

E. TEST FORMAT REQUESTED (Must check one or request will be returned, unprocessed.)

- ☐ (01) Regular Type
- ☐ (02) Large Type
- ☐ (03) Braille (printed copy included)
- ☐ (04) Cassette with Regular Type
- ☐ (05) Cassette with Large Type
- ☐ (06) Cassette with Raised Line/Braille Tables and Illustrations
- ☐ (07) Reader's Script with Regular Type
- ☐ (08) Reader's Script with Large Type
- ☐ (09) Reader's Script with Raised Line/Braille Tables and Illustrations

F. EXTENDED TIME REQUESTED ☐ Yes ☐ No

G. OTHER ACCOMMODATIONS REQUESTED *(Explain)* _____

Note: The authorized timing code and approval/denial of test formats will appear under the student's name on the Test Materials Distribution List.

SIDE 1 THIS FORM MAY BE DUPLICATED AS NEEDED. **(Completion of Side 2 required for all requests.)**

Appendix C

Diagnosis, Timing Guidelines, and Test Package Legend For Tables 2, 4 and 6.

Timing Guidelines

Standard Times:	English Test	= 45 minutes
	Mathematics Test	= 60 minutes
	Reading Test	= 35 minutes
	Science Reasoning Test	= 35 minutes

Timing Guideline #2 = up to double time on the English and Mathematics tests, and up to triple time for the Reading and Science Reasoning tests

Timing Guideline #3 = up to triple time for each of the four tests

Timing Guideline #4 = up to three hours for each of the four tests

Test Package

Package 1 = regular print version

Package 4 = audio cassette plus regular print version

Diagnosis

Attention Deficit (AD)

Dyslexia (DY)

All other Learning Disabilities (LD)